axis which is inclined relative to the first axis, the driven member being engaged by the roller means, wherein the inclined roller means comprises a single annular roller and urging means for urging the annular roller into driving contact with the driven member, the urging means comprising at least one hydrostatic pad means situated inside the annular roller.

2. A friction drive as claimed in claim 1 wherein the driven member is a tube and the annular roller frictionally engages the internal bore of the tube.

3. A friction drive as claimed in claim 2 wherein the tube is of steel.

4. A friction drive as claimed in claim 3 wherein the inner surface of the tube is hardened and ground.

5. A friction drive as claimed in claim 1 wherein the drive includes a high speed drive motor for rotating the drive bar, the motor having velocity feedback control.

6. A friction drive as claimed in claim 1 wherein the drive bar is rotatable about an axis, and oil for the hydrostatic pad means acting on the roller is supplied, in use, through the drive bar along the axis.

7. A friction drive as claimed in claim 6 wherein the drive bar comprises a cylindrical tube.

8. A friction drive as claimed in claim 7 wherein the roller means further comprises a skewed roller assembly in which the annular roller is incorporated, the skewed roller assembly is situated at a first, trailing end of the drive bar and the drive bar has a remote forward end which, in use, is driven in rotation by drive means and the forward end being mounted on hydrostatic bearings.

9. A friction drive as claimed in claim 8 wherein the drive includes a common oil supply for supplying oil to the hydrostatic pads means and to the hydrostatic bearing, the oil being supplied along the central axis of the drive bar to the skewed roller assembly.

10. A friction drive as claimed in claim 9 wherein the oil is supplied to the skewed roller assembly via a restrictor.

11. A friction drive as claimed in claim 10 wherein, at the skewed roller assembly, drillings are provided to supply oil to the bore and end faces of the roller, so that the roller assembly is fully floating hydrostatically on a spindle projecting from the first bend of the drive bar.

12. A friction drive as claimed in claim 11 wherein further drillings for supplying oil to the hydrostatic pad means comprises four equi-angularly spaced hydrostatic pads, the roller assembly having the pads which urge the skewed roller assembly radially so that the roller is in frictional driving engagement with the driven tube.

13. A friction drive as claimed in claim 12 wherein oil seeping from the roller assembly is returned to a sump at the driven end of the drive bar, via the interior of an extensible tube, which is secured between the forward end of the driven tube and a housing at the forward end of the drive bar, wherein drillings are provided to supply oil to the hydrostatic bearings which locate a rotating assembly carrying the forward end of the drive bar.

14. A friction drive as claimed in claim 13 wherein the extensible tube is corrugated or telescopic.

15. A friction drive as claimed in claim 1 wherein the extent of axial movement of the driven member, for a single revolution of the roller, is determined by the angle of skew of the roller.

16. A friction drive as claimed in claim 15 wherein small precise axial movements of the driven member of the order of 1 nm (nanometre) are achieved per revolution of the drive bar.

17. A machine tool having a carriage, a machine axis and a twist action roller friction drive as claimed in claim 1 wherein said driven member is fixed to or comprises an integral part of the carriage and is aligned with the machine axis.

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